A2500-2
11/81

Paper Paperboard & Wood Pulp

MONTHLY STATISTICAL SUMMARY · Vol. 59 · No. 10 October, 1981

Production Steady

The rate of paper and paperboard production in the August - September period continued along the steady path it has followed most of the year. Adjusted for seasonal and workday factors, the August - September rate was 65.9 million tons per year, about 2% above the 64.6 million ton per year level reached in June - July period and close to the high reached in the first two-month period of the year. The rate for the third quarter as a whole was 1.0% above that of the second quarter and almost equal to the first quarter average.

The steady pattern of paper production in August and September contrasts with the weakness shown in some of its major markets. For example, total economic activity as measured by the real gross national product declined at the rate of 0.6% per year in the third quarter, according to preliminary data. The production of nondurable consumers goods in the third quarter averaged 0.2% above that of the second quarter but September data already indicated some decline. Total printing and publishing activity in the third quarter, as reported in the Federal Reserve Board's production index, was 2% above its second quarter level, with the growth concentrated in newspaper and job printing publishing.

Among the paper grades, the strength was concentrated in the printing and writing sectors, with all the major grades showing some modest increases. The rate of incoming orders as well as the backlog of new orders for printing papers show a weakening trend in demand.

The seasonally adjusted rate of paperboard production continued upward in the August - September period from its low point reached at the end of the second quarter. Although the major strength was shown in the container board grades, the rate of production of solid bleached board and recycled board also increased. The strength in contain-

Continued on Page 2

erboard demand is consistent with the trend of shipments of corrugated shipping containers. The Fibre Box Association reported that the rate of shipments in the third quarter of 1981 was above the 250 billion square feet per year rate, well above the low point reached three months earlier but slightly below the highs reached at the beginning of the year. The production of unbleached kraft paperboard for export declined sharply in September from the August rate, reaching a low for the year. The nine-month total of kraft paperboard production for export was 22% below its year ago level; production of semi-chemical paperboard for export was down about 42%; while solid bleached paperboard for export was slightly above its year ago total.

The year-to-date comparison of paper and paperboard production relative to that of 1980 must be considered in terms of the different production trends evident in these two years. Production dropped sharply from the first to the second quarters of 1980, then turned around in the third quarter and was in a fairly strong uptrend during the last three months of the year. In 1981, first quarter production was also relatively strong, but the decline in the second quarter was much less than that shown in 1980. However economic activity, as noted earlier, eased downward in the third quarter of 1981 and current indications point to some weakness in the last three months of the year.

The average annual rate of production of paper and paperboard in the first nine months of 1981 was 65.6 million tons per year, 3.6% above the comparable rate in the first three quarters of 1980 and 3.0% above the average reached for all of 1980. Weekly data on paper and paperboard production in the early weeks of October show that paper production continued at a fairly strong rate, but paperboard production moved below its September levels.

Technical note: The paper and paperboard production totals for 1979 and 1980 and the monthly data for 1981 shown on the table on page 3 have been revised from the totals previously shown. As noted on this table, the data on production of "other paper", which includes packaging and industrial papers other than unbleached kraft paper plus special industrial papers, are based on information reported by the Bureau of the Census. The Bureau of the Census recently published its 1980 annual issue of Current Industrial Reports, Pulp, Paper and Board. In that report it revised production of these grades of paper downward by 254,000 tons in 1979 and 433,000 tons in 1980, probably reflecting a re-classification to other categories of tonnage previously reported in these categories. This change also affected the data for these grades in 1981. Census also revised its data on wet machine board and construction paper and board but the 1979 change was small and the 1980 revision was upward. Census will probably further revise these monthly data for 1981 in its next issue of Pulp, Paper and Board.

Continued on Page 11

PAPER AND PAPERBOARD STATISTICS

PRODUCTION, SHIPMENTS AND ORDERS

(Thousands of Tons)

	YEAR 1979	YEAR 1980	JUNE 1981	JULY 1981	AUG. 1981	SEPT 1981	Annual Rate Y-T-D 1981	% Change from same Period Last Year
PAPER					R	P		
Newsprint - Production	4062	4672	445	446	469	425	5227	12.4
- Shipments	4066	4667	435	442	465	452	5209	12.5
Printing & Writing	15413	15605	1332	1232	13[illegible]	1321	15926	2.3
Groundwood Paper - Shipments	1509	1498	120	111	126	116	1447	-3.5
- New Orders	1519	1475	102	125	129	126	1464	-0.5
- Unfilled Orders	149	110	106	119	122	133	133	20.8
Coated Paper - Shipments	4527	4673	411	387	422	474	4963	7.9
- New Orders	4547	4753	406	407	424	410	4879	3.3
- Unfilled Orders	585	391	313	341	340	318	318	-20.9
Unctd Free Sheet - Shipments	7823	7983	664	620	644	637	7955	-0.7
- New Orders	7836	7694	612	639	630	604	7788	1.9
- Unfilled Orders	781	546	470	498	475	447	447	-20.1
Thin Paper - Production	372	343	31	25	30	29	345	-0.1
Cotton Fiber Paper - Shipments	125	126	10	8	10	11	121	-2.7
Bleached Bristols - Production	1058	982	97	83	94	95	1096	11.0
Tissue Paper - Production	4520	4475	374	347	395	360	4477	2.1
Total Packaging & Other Paper	5825	5539	464	428	474	452	5661	1.7
Unbl. Kraft Paper - Shipments	4093	3930	317	298	330	315	3953	-0.4
Other Paper - Production * #	1797R	1609R	148	131	146	137	1709	6.7
TOTAL PAPER-Production-Unadj.	29890R	30191R	2616	2454	2666	2568	31291	3.7
-Production-S.A.			2555	2633	2570	2669	31224	4.1
PAPERBOARD - PRODUCTION								
Solid Wood Pulp Furnish	23838	23881	2051	1980	2115	2000	24989	3.7
Unbl. Kraft Linerboard (1)	13951	14232	1228	1156	1318	1220	15018	4.5
Production for Export (1)	1645	2380	160	142	180	138	1904	-22.4
Other Unbl. Kraft Paperboard	1200	1063	100	111	65	69	1107	-0.5
Semichemical Paperboard	4689	4723	391	388	396	391	4835	2.4
Production for Export	98	322	13	11	11	11	153	-42.3
Solid Bleached Paperboard	3998	3862	332	325	336	319	4029	3.4
Production for Export	491	545	49	40	49	45	559	0.6
Recycled Paperboard	7591	7071	615	529	622	593	7271	3.3
Production for Export	22	83	1	1	1	1	23	-72.8
TOTAL PAPERBOARD-Prod.-Unadj.	31429	30952	2666	2509	2737	2592	32260	3.6
- Containerboard Prod.(Dom. Use)	18825	18070	1606	1557	1668	1625	19656	7.9
- Boxboard Prod.(Dom. Use) (2)	5776	5477	469	430	477	453	5728	4.2
- All Other P'bd Prod.(D.U.) (2)	4571	4075	368	329	349	328	4237	4.0
- Total Paperbd Prod. for Export	2257	3329	223	194	242	185	2639	-21.4
TOTAL PAPERBOARD PROD. - S.A.			2576	2625	2642	2717	31958	4.0
WET MACHINE BOARD *	144	138	11	12	14	14	170	27.0
BUILDING PAPERS *	1868R	1369R	106	98	107	97	1274	-8.3
INSULATING BOARD *	1263R	1051R	79	77	90	80	971	-7.7
TOTAL ALL GRADES - Unadjusted	64594R	63701R	5478	5150	5613	5351	65966	3.3
- Production - S.A.			5314	5461	5404	5580	65584	3.6
HARD PRESSED BD. (not in total)*	2306 R	1970R	172	168	180	155	2050	8.1

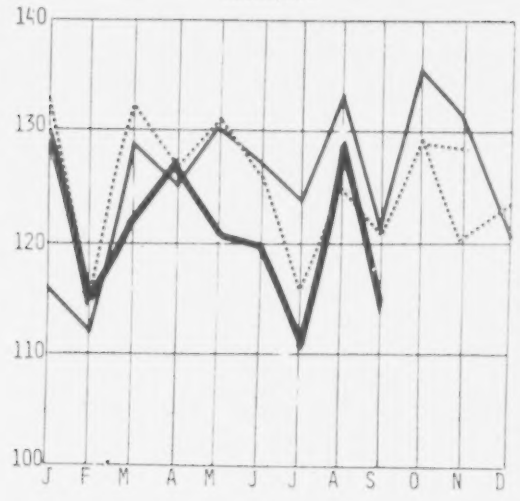
* Census Data - Production. Last two months estimated.
\# 1981 data estim. by API to conform to revised data for prior years.
(1)Includes all exports of kraft paperboard.
(2)Data for unbl. kraft folding boxboard incl. in aAll Other P'bd.

S.A. Seasonally Adjusted
P Preliminary
R Revised

GROUNDWOOD PAPER, UNCOATED

THOUSANDS OF TONS

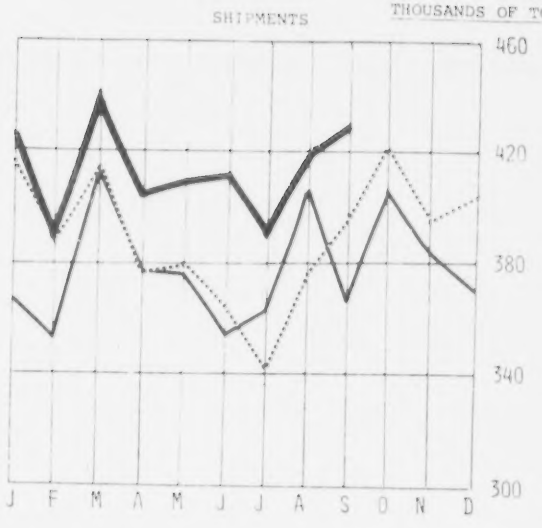
SHIPMENTS



COATED PAPER

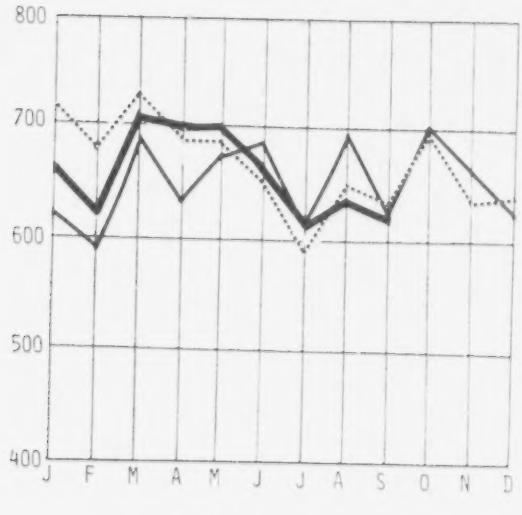
SHIPMENTS

THOUSANDS OF TONS



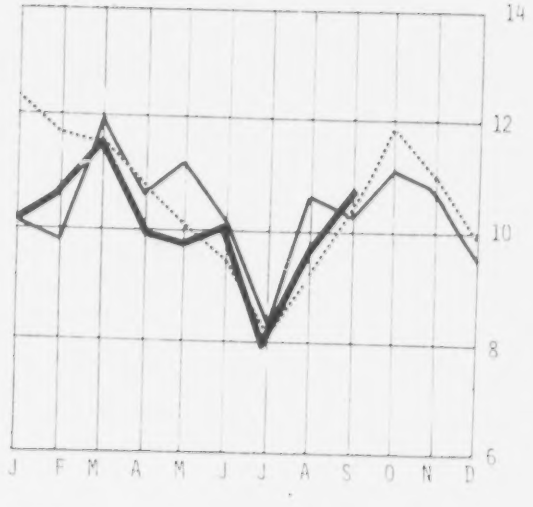
UNCOATED FREE SHEET PAPERS

SHIPMENTS



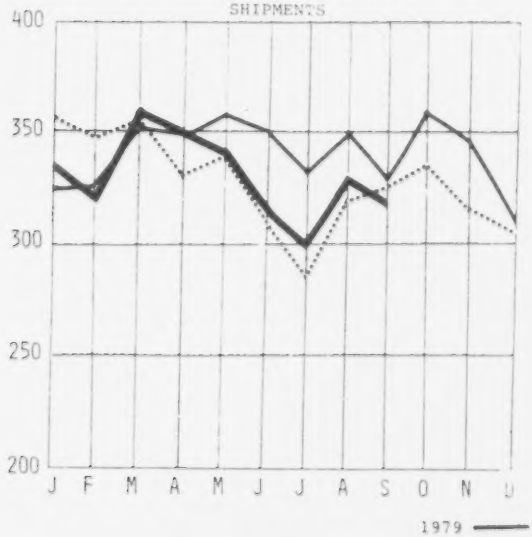
COTTON FIBER PAPER

SHIPMENTS



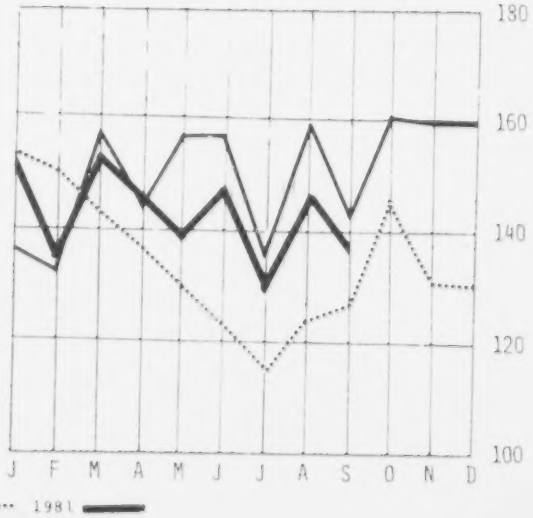
UNBLEACHED KRAFT PACKAGING
AND INDUSTRIAL CONVERTING PAPER

SHIPMENTS



OTHER PAPER

PRODUCTION



1979 ——— 1980 ····· 1981 ———

WOOD PULP STATISTICS
(Thousands of Tons)

	YEAR 1979	YEAR 1980	MAY 1981	JUNE 1981	JULY 1981	AUG. 1981	Annual Rate Y-T-D 1981	% Change from same Period Last Year
TOTAL WOOD PULP (1)					R	P		
Total Wood Pulp - Production	49367	50560	4582	4393	4057	4514	52712	3.3
- Imports	4318	4051	404	349	329	323	4207	0.3
- Exports	2935	3806	363	359	237	300	3712	-4.2
- New Supply	50750	50805	4623	4383	4149	4537	53206	3.6
Dissolving Pulp - Production	1497	1508	125	120	102	140	1404	-10.1
- Imports	193	263	20	11	29	14	227	-19.4
- Exports	764	769	61	70	65	65	781	-5.9
- New Supply	926	1002	84	61	66	89	851	-16.1
Paper Grades - Production	39416	40430	3682	3508	3255	3600	42221	3.4
Chemical Pulp - Imports	3923	3615	360	326	296	290	3784	1.4
- Exports	2100	2956	300	286	170	234	2906	-1.6
- New Supply	41239	41089	3742	3547	3381	3656	43099	3.6
Groundwood and - Production	4394	4579	422	427	387	444	5018	10.1
Thermo-Mech. - Imports	201	173	23	12	4	20	196	7.7
- Exports	70	81	2	3	1	2	26	-71.8
- New Supply	4525	4672	444	437	389	461	5187	11.7
Semi-Chemical - Production	4060	4043	353	338	313	330	4069	-0.3
- Imports	0	0						
- Exports	0	0	------	Included	with	Groundwood	Pulp ------	
- New Supply	4060	4043	353	338	313	330	4069	-0.3
MARKET WOOD PULP								
Total Market - Production	5678	6488	537	538	479	580	6287	-4.7
Wood Pulp - Imports	3046	2947	250	271	217	237	2942	-1.8
- Exports	2795	3513	297	314	206	286	3306	-5.2
- New Supply	5929	5921	489	496	489	531	5923	-3.0
Dissolving Pulp - Production	1497	1506	125	120	102	139	1363	-12.6
- Imports	306	235	20	18	23	10	234	-3.9
- Exports	869	876	77	58	49	72	750	-15.9
- New Supply	934	865	68	80	77	78	847	-7.1
Paper Grades - Production	4118	4913	412	418	376	441	4923	-0.7
Chemical Pulp - Imports	2734	2687	226	251	191	225	2653	-3.1
- Exports	1880	2588	220	255	156	214	2542	0.4
- New Supply	4972	5012	419	414	411	452	5034	-2.5
Groundwood Pulp - Production	63	69	0	0	0	0	1	-99.1
and All Other - Imports	7	26	3	2	3	2	56	
- Exports	46	50	1	1	1	0	14	-78.0
- New Supply	24	44	2	2	2	2	42	

(1) Prodctn excludes defibrated, exploded & screenings-(000 tons): 1979 - 3,274; 1980 - 2,451; '81 ARY-T-D - 2,778
SOURCES: Total Wood Pulp Imports & Exports - Department of Commerce. Total Wood Pulp Production & Market Wood Pulp Production, Imports & Exports - Pulp & Raw Materials Group, API.

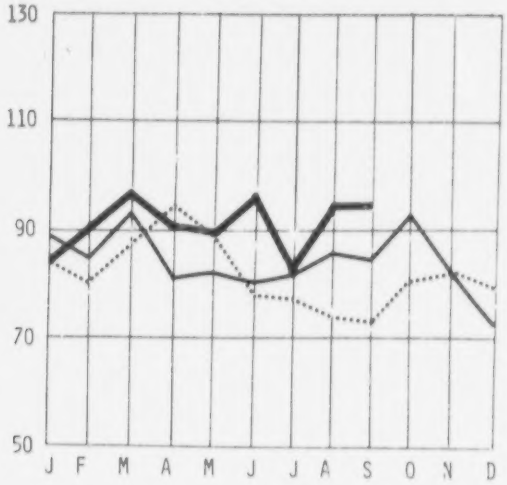
FIBROUS RAW MATERIALS
(Thousands of tons)

CONSUMPTION AT PAPER & BD. MILLS					R	P		
Total	65867	64552	5873	5541	5148	5669	67122	3.9
Total Wood Pulp (2) A	49804	49426	4534	4251	3987	4370	51699	3.8
Market Wood Pulp C, E	5031	4789	426	465	422	460	5263	10.0
Waste Paper (3) A	15361	14520	1288	1239	1115	1249	14810	4.5
Rags, Straw & Other C, E	702	607	51	50	47	50	614	3.3
INVENTORIES								
Wood Pulp at Pulp Mills A	107	117	176	189	189	202	202	45.4
Market Pulp at Pulp Mills A	132	239	312	291	338	373	373	57.0
Mkt Pulp at Ppr.& Bd. Mills CE	426	449	430	488	507	510	510	6.4
Waste Ppr.at Ppr.&Bd. Mills (4)	904	1057	1008	1023	1133	1089	1089	16.2
Rags, Straw and Other at Paper and Board Mills C, E	61	71	73	69	72	75	75	29.3
Mkt Wood Pulp Days of Supply A	38	45	48	47	53	53	53	-2.5
Wood Pulp Consumption at at Non-Paper Mills C, E	913	825	66	73	66	70	811	-2.5

A - Pulp & Raw Materials Group, API; C - Bureau of the Census; E - Most Recent Month Estimated by API
P - Preliminary; R - Revised; (0) - Indicates zero to five-hundred short tons
(2) Excl. cons. of defib. & expl. pulp for hard pressed bd.(000 tons): 1979 - 1507; 1980 - 1124; 1981 ARY-T-D - 1258
(3) Census Waste Paper Consumption, (000 tons): 1979 - 12,915; 1980 - 12,705; Jan-Jul'81 ARY-T-D - 13,719
(4) Census data prior to 1979; more recent data are from the Paper Stock Conservation Committee, A.F.I.

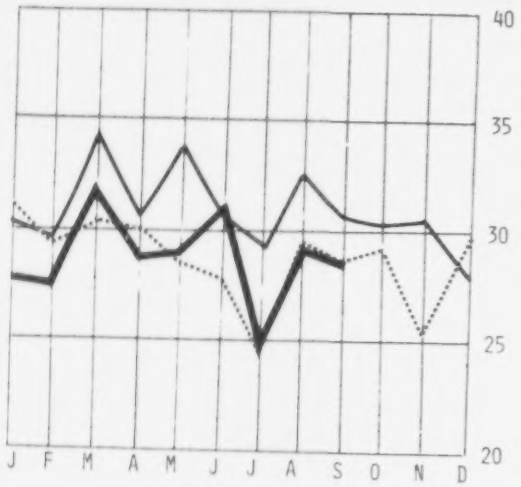
THOUSANDS OF TONS

BLEACHED BRISTOLS
PRODUCTION

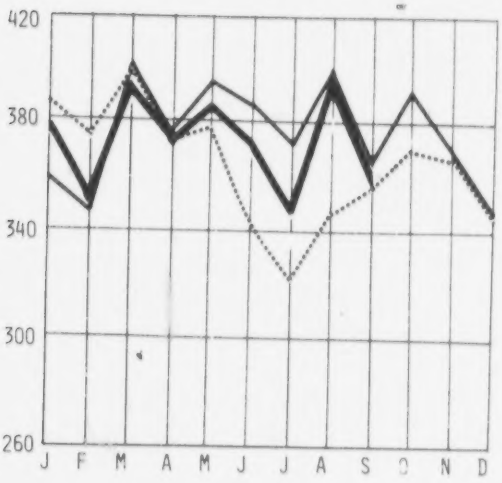


THIN PAPERS
PRODUCTION

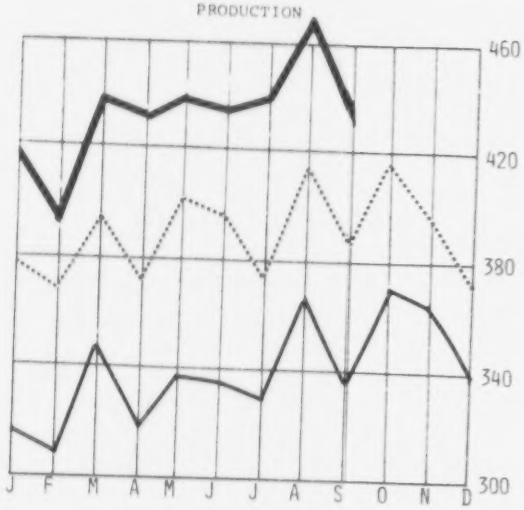
THOUSANDS OF TONS



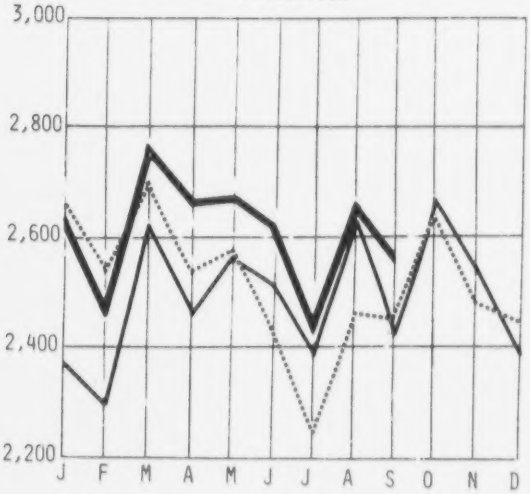
TISSUE PAPER
PRODUCTION



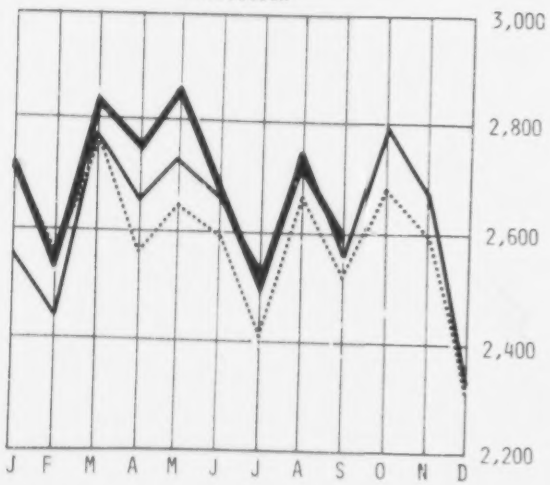
NEWSPRINT
PRODUCTION



TOTAL PAPER
PRODUCTION



TOTAL PAPERBOARD
PRODUCTION



1979 ——— 1980 ····· 1981 ———

FIBROUS RAW MATERIALS (Continued)
(Thousands of Standard (128 cubic foot) Cords)

		YEAR 1979	YEAR 1990	MAY 1981	JUNE 1981	JULY 1981	AUG. 1981	Annual Rate Y-T-D 1981	% Change from same Period Last Year
PULPWOOD									
Total U.S.	- Total Receipts	78625	81805	6465	6649	6799	6839	80006	-3.6
	- Total Consumpt.	79566	80522	6716	6790	6526	6796	80676	-0.8
	- Residues #	30015	29402	2484	2617	2592	2623	31191	6.9
	- Inventories	5506	6285	5123	4985	5464	5552	5552	-12.0
So. Atlantic	- Total Receipts	26126	26742	2051	2081	2007	2009	24906	-9.2
	- Total Consumpt	26523	26691	2123	2101	2035	2083	25400	-7.3
	- Residues #	8858	8776	701	793	717	748	8916	0.2
	- Inventories	1052	1158	926	926	900	829	829	-31.5
Northeast	- Total Receipts	7461	7710	558	686	724	677	7707	0.7
	- Total Consumpt	7584	7487	634	620	644	663	7755	3.8
	- Residues #	1670	1649	124	136	94	101	1422	-13.1
	- Inventories	674	724	515	572	650	652	652	-8.7
South Central	- Total Receipts	26654	27509	2296	2280	2291	2345	27587	1.3
	- Total Consumpt	26432	27074	2332	2353	2269	2363	27882	2.8
	- Residues #	8669	8001	783	768	771	739	9237	18.7
	- Inventories	1472	1830	1426	1303	1366	1365	1365	-7.5
North Central	- Total Receipts	5630	5514	444	472	513	487	5654	0.0
	- Total Consumpt	5535	5292	498	539	476	470	5771	9.6
	- Residues #	1501	1361	139	111	109	123	1415	1.7
	- Inventories	993	1210	1143	1084	1120	1134	1134	-4.0
West	- Total Receipts	12754	14330	1116	1130	1264	1321	14153	-5.8
	- Total Consumpt	13492	13978	1129	1177	1102	1217	13869	-1.3
	- Residues #	9317	9615	747	809	901	912	10202	7.8
	- Inventories	1315	1363	1115	1100	1428	1572	1572	-9.1

- Consumption of Residues in Cord Equivalents.
SOURCE: American Pulpwood Association

UNITED STATES TRADE WITH CANADA
IMPORTS FROM CANADA

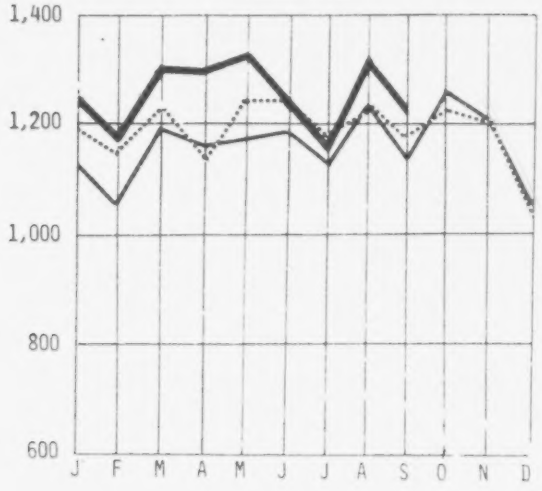
	YEAR 1980 Tons	YEAR 1980 $000	MAY 1981 Tons	MAY 1981 $000	AUG. 1981 Tons	AUG. 1981 $000	Annual Rate Y-T-D 1981	% Change from same Period Last Year
Pulpwood, Roundwood (in cords of 128 cubic feet)	236831	10865	14817	721	21173	989	175037	-5.2
Pulpwood Chips	1723579	45887	129366	3755	138439	4086	1761779	1.9
Wood Pulp, Total	3053004	1607592	300336	141159	292332	124343	3962961	0.8
Waste Fibrous Materials, Total	118464	20761	10256	1651	9913	1980	110046	-14.8
Paper,Paperboard&Products,Total	8312214	3036632	640567	256933	590624	246748	8037599	-5.9
Paper, Paperboard,Wet Machine Bd. & Constr. Paper & Bd. #	8262720	2971455	637420	252433	586335	240405	8005636	-5.6
Paper, Total	7219622	2868402	601080	244501	547793	232160	7462559	-5.7
Newsprint	7126839	2578687	594525	219486	499271	204654	6902136	-5.0
Printing&Writing & Rel.Par.	510412	239837	38826	19853	40123	21334	460499	-17.2
Pack. & Ind. Conv. Paper	77046	48466	7392	4753	7258	5178	90891	16.1
Special Industrial Paper	1418	2077	153	232	275	440	2556	102.5
Tissue Paper	3958	2336	271	177	815	554	6476	19.2
Paperboard, Total	96896	24667	9000	2473	8881	2193	140215	34.7
Wet Machine Board	1464	729	102	54	96	49	1056	-32.1
Construction Paper and Bd. #	444688	77608	27238	5405	30065	6003	401806	-13.9
Convtd Paper&Paperbd Products	49993	65176	3148	4501	4789	6343	31963	-44.0

EXPORTS TO CANADA

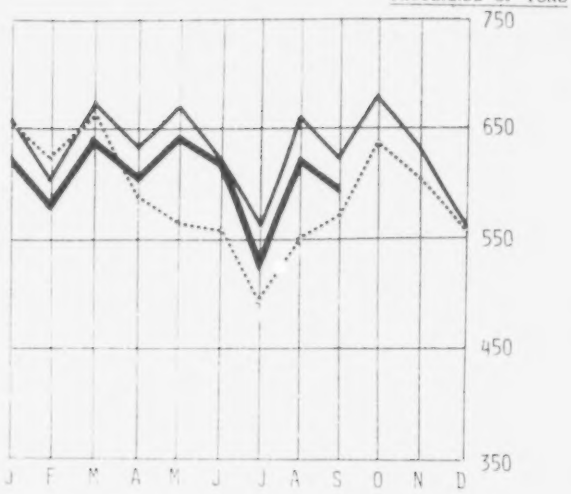
Pulpwood, Roundwood (in cords of 128 cubic feet)	169622	8862	12476	642	27998	1461	166911	13.0
Pulpwood Chips	23388	934	1478	49	3018	85	39138	74.4
Wood Pulp, Total	147359	51651	8053	3865	15858	7346	128283	-23.9
Cotton Pulp & Other Pulp	10363	5056	392	231	365	234	6725	-45.6
Waste Paper	450762	48737	36662	4229	32741	3794	380847	-23.2
Paper,Paperboard&Products-Total	565979	382416	51955	36171	58093	40389	753208	32.0
Paper, Paperboard, Wet Machine Bd. & Constr. Paper & Board #	413325	264890	38402	26361	44518	28466	578946	41.0
Paper, Total	216661	180275	20132	17670	24171	19467	304889	43.3
Newsprint	3116	2651	255	1513	556	300	10244	435.7
Printing&Writing & Rel.Par.	117761	91293	11276	9582	14557	10837	181902	60.9
Pack. & Ind. Conv. Paper	16872	11454	1175	989	2225	1522	24926	77.6
Special Industrial Paper	73079	70135	4596	5344	6476	6474	80146	3.6
Tissue	5814	4842	528	236	328	333	7672	20.3
Paperboard, Total	166459	70926	15755	7677	18133	8144	230425	38.3
Wet Machine Board	4105	2437	264	164	370	283	6943	91.8
Construction Pap. & Bd. E #	26101	11751	2251	750	1844	622	36690	32.7
Convtd Paper&Paperbd Products	152654	117527	13553	9860	13574	11924	174262	8.8
# - Hard Pressed Board (not in total)								
Imports of Hard Pressed Bd.	40723	8181	1367	324	422	100	28586	-24.8
Exports of Hard Pressed Bd.	19802	7314	2599	687	6086	1729	40680	109.8

SOURCE: Bureau of Census, Department of Commerce. E - Estimate of tonnage based on square foot data

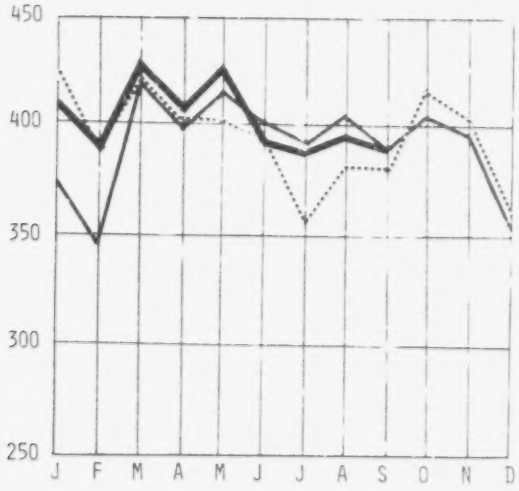
UNBLEACHED KRAFT LINERBOARD
PRODUCTION
THOUSANDS OF TONS



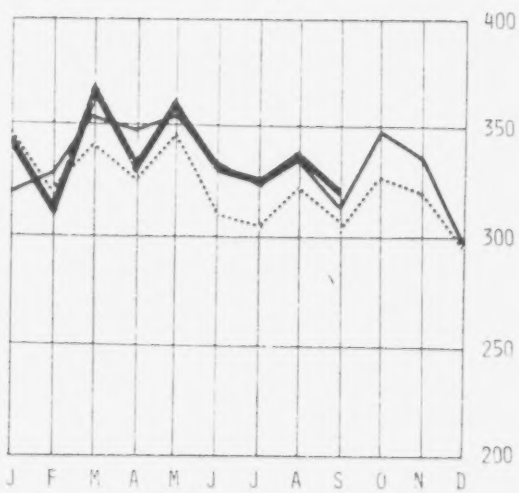
RECYCLED PAPERBOARD
THOUSANDS OF TONS



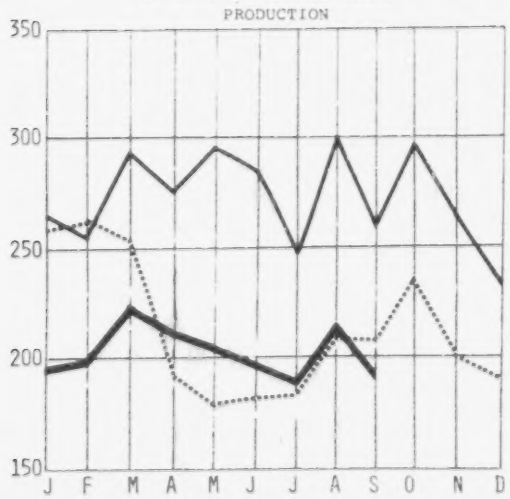
SEMI-CHEMICAL PAPERBOARD
PRODUCTION



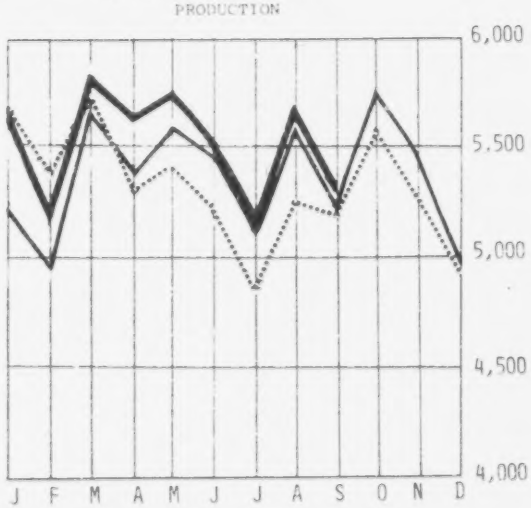
SOLID BLEACHED PAPERBOARD
PRODUCTION



WET MACHINE BOARD AND
BUILDING PAPER AND BOARD
PRODUCTION



TOTAL PAPER AND BOARD
PRODUCTION



1979 ——— 1980 ····· 1981 ■■■■

PULP, PAPER AND PAPERBOARD IMPORTS AND EXPORTS DATA

IMPORTS

	YEAR 1980 Tons	YEAR 1980 $000	JULY 1981 Tons	JULY 1981 $000	AUG. 1981 Tons	AUG. 1981 $000	(1) Annual Rate Y-T-D 1981	% Change from same Period Last Year
Pulpwood, Roundwood (in cords of 128 cubic feet)	236818	10866	14817	721	21173	989	175058	-5.2
Pulpwood Chips	1723748	45899	129366	3795	138432	4088	1761756	1.9
Total All Imports	12957685	5136214	1014631	436892	953908	421744	12671959	-5.1
Wood Pulp, Total	4050919	1683835	326689	141385	323375	137257	4206678	0.3
Waste Paper	87064	17188	6727	900	5820	1001	69380	-24.7
Other Fibrous Materials	41818	14063	4550	1397	5414	2174	52990	13.2
Paper,Paperbd&Products,Total	8777883	3421108	674665	293211	619300	291313	8342912	-7.5
Paper,Paperboard,Wet Machine Bd. & Construction Paper & Board	8682441	3189796	666686	267417	609840	259904	8252193	-7.4
Paper, Total	8109064	3060491	627063	258756	567229	243833	7673501	-7.7
Newsprint	7279349	2637857	568212	225115	502114	205808	6951089	-6.3
Printing & Writing	739682	363246	50340	27346	56841	31179	613331	-24.0
Uncoated Groundwood	487971	204873	36686	17663	41486	20545	443594	-15.6
Uncoated Book	115528	62466	10397	5822	10439	6160	137146	-12.7
Coated Print.& Impres. Par	114927	68868	2155	1661	3131	2332	39183	-71.1
Bristols	1077	739	65	69	40	42	774	-43.1
Writing and Similar Paper	13858	18119	423	1000	470	1116	12519	-13.9
Thin (except Cigarette)	6321	8181	615	882	774	1186	10115	52.4
Total Pkg & Other Paper	85912	56929	8219	6100	7929	6274	102473	17.2
Unbleached Kraft Paper	33889	14295	3290	1543	2544	1306	38589	4.2
Other Pkg. & Indust. Paper	52023	42636	4929	4558	5385	4968	63884	27.7
Tissue	4121	2461	291	195	838	572	6608	16.8
Paperboard, Total	97583	25576	9113	2568	8822	2366	141285	34.7
Test or Containerboard	43472	11340	2782	700	3203	808	61014	23.4
Semi Chemical Corrugating	31549	6156	2911	667	3208	727	50177	59.1
Other Paperboard	22762	8080	3421	1201	2412	831	30094	26.0
Wet Machine Board	2116	1335	189	139	161	109	1691	-27.8
Construction Paper & Bd. #	473678	82393	30321	5953	33435	6596	435717	-12.0
Building Paper	435666	73238	27239	5020	30417	5792	391357	-14.6
Insulating Board	20208	4765	2089	598	2053	585	27373	55.6
Other Building Board	17804	4391	993	335	965	220	16986	-11.5
Convtd Paper&Paperbd Products	95442	25131	7958	2679	9460	2409	90719	-13.3
Paper Products, Total	89328	23802	7168	2416	8640	2670	83031	-15.6
Paperboard Products, Total	6114	1328	811	263	819	170	7688	25.0
Notes								
Other: No Weight Avail. ($000)		82139		10064		10389	127439	62.6
Total Imports Incl. Other($000)		5218353		446956		432133	5556580	4.6

EXPORTS

							(1)	
Pulpwood, Roundwood (in cords of 128 cu. ft.)	185526	9389	12400	643	28828	1499	171168	5.2
Pulpwood Chips	447234	22409	40009	2053	58762	4711	406885	-12.6
Total All Exports	11832242	4839634	985152	408490	825502	384000	11061404	6.1
Wood Pulp,Total	3805549	1652097	336693	104499	300415	133318	3712320	-4.5
Cotton Pulp and Other Pulp,	148485	92607	9411	5305	8231	5681	133994	-19.7
Waste and Old Paper	2664272	322195	194193	23804	160743	19365	1923458	-16.7
Paper, Paperbd&Products, Total	5213936	2772733	414850	243582	355913	226656	4091733	-1.1
Paper,Paperboard,Wet Machine Bd. & Construction Paper & Board	4581878	2052406	368567	183262	308945	162443	4261624	-1.2
Paper, Total	907447	737363	92355	72091	81392	67868	1032522	21.8
Newsprint	174869	86403	14741	16433	29073	13850	252875	59.3
Printing & Writing	340859	306098	28925	27153	31050	27396	405666	30.1
Uncoated Groundwood	100951	71716	8070	6666	11767	8324	124400	33.1
Clay Coated Paper	92351	75160	6785	5909	7120	6183	91347	7.3
Uncoated Free Sheet	88313	94826	10084	9556	8390	8549	125434	60.9
Other Printing & Writing	59244	64396	3986	5022	3773	4340	64285	16.8
Total Pkg. & Other Paper	330780	291341	25876	25428	16992	21935	312789	-1.2
Unbleached Kraft	142825	61346	8368	3770	4001	2365	116252	-11.1
Other Pkg. & Indust. Paper	187955	229995	17508	21658	12991	19571	196537	5.8
Tissue	60939	53521	3213	3078	4227	4686	61193	1.1
Paperboard, Total	3608752	1283130	270570	108737	222652	92082	3142385	-7.6
Solid Wood Pulp	3359998	1182718	260636	103299	213358	86331	2948099	-8.2
Total Linerboard	2527245	790070	190750	64303	159568	55647	2137873	-12.5
Bleached Kraft Linerboard	233924	75960	10644	4.31	8002	3365	179522	-9.7
Unbleached Kraft Linerbd	2293322	714110	180107	60072	150566	52282	1958346	-12.7
Other Unbleached Kraft	163825	60633	15075	6650	11391	5013	159231	-10.1
Other Bleached Kraft	606044	314751	49319	30605	40421	24628	585887	1.6
Semi-Chemical Corrugating	62884	17264	5492	1740	2976	1043	65108	307.4
Recycled Paperboard	248754	100412	9934	5439	9294	5251	194286	2.8
Wet Machine Board	8017	5258	550	396	521	412	10827	49.8
Construction Paper & Bd. #	57662	26655	4632	2039	4380	2081	76089	35.6
Building Paper	31436	15299	1768	778	1278	941	22447	-21.5
Insulating Board E	26226	13356	2864	1261	3102	1240	53642	94.9
Convtd Paper&Paperbd Products	632058	720328	46343	60620	46968	64214	629809	-0.4
Paper Products, Total	378581	523511	28915	43849	28072	46220	364618	-6.4
Paperboard Products, Total	253477	196817	17428	16771	18896	17994	265191	9.1
Notes								
Other: No Weight Avail. ($000)		10300		1342		855	10793	2.2
Total Exports Incl. Other($000)		4849934		383832		384055	5040560	6.5
# Hard Pressed Board (not in total)								
Imports of Hard Pressed Board	172023	32469	16184	3457	17456	3703	184146	1.5
Exports of Hard Pressed Board	28900	10706	4031	1206	9183	2779	60891	131.0

SOURCE: Bureau of Census, U.S. Department of Commerce. E - Estim. of tonnage based on square foot data.
(1) Annual Rate Year-To-Date is in tons unless otherwise specified in item description.

PAPER AND PAPERBOARD PRODUCTION

CENSUS DATA

(Thousands of Tons)

	R 1979	YEAR R 1980	APRIL 1981	MAY 1981	JUNE 1981	JULY 1981	Annual Rate Y-T-D 1981	% Change from same Period Last Year
PAPER					R	P		
Newsprint	3778	4660	461	432	447	460	5222	13.0
Uncoated Groundwood Papers	1800	1538	120	113	119	111	1411	-9.5
Coated Papers	4580	4751	408	415	422	399	4978	6.8
Uncoated Free Sheet (1)	7655	8008	683	686	664	620	7939	-2.2
Cotton Fiber Paper (1)	130	131	10	11	10	8	118	-11.1
Thin Papers	371	333	29	29	31	25	344	2.4
Bleached Bristols	957	941	80	81	85	69	990	-0.5
Tissue Paper	4601	4474	389	379	379	359	4529	0.5
Unbleached Kraft Packaging & Industrial Conv. Papers(1)	3911	3718	327	313	307	277	3728	-2.9
Other Paper (1)	1797	1609	145 R	139 R	148	131	1712	5.1
TOTAL PAPER GRADES	29580	30164	2650	2598	2622	2458	30971	1.9
PAPERBOARD								
Solid Wood Pulp Furnish	23585	23902	2151	2136	2091	1993	24916	3.6
Unbleached Kraft Linerboard	13857	14249	1300	1257	1255	1176	14788	2.8
Other Unbl. Kraft Paperboard	1046	1036	95	95	103	100	1117	5.2
Bleached Kraft Paperboard	4065	4034	346	378	351	334	4235	4.5
Semi-Chemical Paperboard	4617	4583	411	406	383	383	4777	4.8
Recycled Paperboard	7583	7243	659	616	643	560	7475	3.8
TOTAL PAPERBOARD GRADES	31168	31143	2811	2751	2734	2553	32391	3.7
WET MACHINE BOARD	144	138	18	15	11	12	173	28.4
CONSTR. PAPER & INSUL. BOARD	3131	2720	191	189	185	135	2245	-8.8
TOTAL ALL GRADES (Excl. H.P.B.)#	64023	63865	5670	5553	5552	5198	65780	2.4

PRODUCER PRICE INDEXES

1967 = 100

	1979	1980	JUNE	JULY	AUG.	SEPT		
Pulp, Paper and Products	219.0	249.2	272.7	273.8	275.7	276.9	271.1	9.7
Pulp, Paper & Products, except Waste Paper ♦	219.2	249.9	274.2	275.4	277.3	278.5	272.6	10.1
Total Wood Pulp	314.3	380.3	396.6	396.6	396.6	396.6	393.9	4.5
Total Paper	229.6	256.8	278.8	280.0	283.8	287.1	277.7	9.1
Total Paper, exc. Newsprint	222.8	249.3	271.2	272.9	275.6	277.1	268.7	9.0
Newsprint	249.9	279.7	301.9	301.9	314.8	320.0	305.3	10.4
Total Paperboard	202.1	234.6	262.7	261.6	261.2	262.5	257.9	10.8
Total Paper and Paperboard ♦	220.9	249.9	273.8	274.2	276.7	279.4	271.6	9.8
Converted Products	209.9	238.5	260.1	260.8	262.5	263.0	257.4	8.7
Waste Paper	206.6	208.7	182.9	182.1	182.1	178.5	183.9	-14.1
All Commodities	235.5	268.8	294.5	296.0	296.2	295.5	292.5	10.2
Industrial Commodities	236.4	274.8	304.7	306.0	307.0	307.2	302.2	11.2

(1) - Grade definitions revised by Census as of January 1979. New grades now consistent with API definitions. 1977 and 1978 Census data adjusted by API for comparability with 1979.

See page 3 for Hard Pressed Board data. ♦ Computed by API P-Preliminary R-Revised

SOURCES: Production - Bureau of Census, U.S. Department of Commerce
Producer Price Indexes -Bureau of Labor Statistics, U.S. Department of Labor

Continued from Page 2

While the industry totals shown are lower than previously reported, the trends remain about as indicated. More detailed information on these revisions will be presented in the forthcoming 1981 issue of the Statistics of Wood Pulp, Paper and Paperboard. Tables showing revised monthly data for paper and paperboard production for 1979, 1980 and the first nine months of 1981 are available on request from the Economics Department.

International Trade

Exports of paper, paperboard and products dropped about 14% from July to August to 356,000 tons, a low for the year. Declines were evident throughout the grade structure, with the largest declines in the paperboard grades. (API's data show that kraft linerboard production for export rose sharply in August from the July level, then declined in September. However, the Census data report exports as they leave the country, so the patterns in the two series are not usually identical.)

The export patterns in the July - August 1981 period are in sharp contrast with those of a year ago. July - August 1981 exports averaged 385,000 tons per month, down about 7% from the first half average of 415,000 per month. In 1980, exports rose sharply in the summer and fall of the year, largely under the impetus of the expansion of linerboard exports to the People's Republic of China.

Exports of wood pulp in the summer of 1980 were also stimulated by the demand for wood pulp by the People's Republic of China. However, the level of wood pulp exports has been fairly steady during 1981. The January - August 1981 rate of 3.71 million tons per year was 4% below its year ago level but only 2.4% below the average 1980 rate.

Imports of paper, paperboard and products declined about 8.2% from July to August 1981, also reaching a low point for the year. The August total of 619,000 tons compares to the 711,000 tons per month average for the first half of the year. Newsprint imports continue to make up the bulk of the total, and here too the trend has been down.

Imports were relatively strong in the second quarter of 1981, probably reflecting anticipation of the strikes in Brititsh Colombia, which occurred in July and August. The August decline in newsprint imports, to 502,000 from 568,000 tons in June and July and 622,000 tons in May, may reflect the impact of those strikes.

Continued on Page 12

Continued from Page 11

As the table on page 9 shows, imports of the printing and writing grades were sharply below year ago levels in the first 9 months of 1981, although the trend during the course of 1981 has been relatively flat. Imports of the packaging paper grades, by way of contrast, were about 18% above the year ago level, but the rate was only 102,000 tons per year. Paperboard imports also rose strongly, but again the rate of 141,000 tons per year was very small compared to the domestic production rate of about 32 million tons per year.

Sales and Earnings

The following table shows data on net sales and net income after taxes for a total of 26 paper and allied products companies as compiled from published data for the first 3 quarters of 1981 and 1980, together with year-to-date totals.

Sales reported by these companies for the first nine months were 9.5% over the comparable year-ago total, while after-tax income declined by 1.6%. As a result, the margin on sales declined from 5.6% in the first three quarters of 1980 to 5.0% in the comparable 1981 period.

Dollar sales of these companies moved upward from the first to second quarter of 1981, then eased downward in the third, partly for seasonal reasons. Profits also showed a similar pattern, rising from the first to second quarter and falling in the third. Again, the third quarter decline was partly seasonal in nature.

The impact of the 1980 recession can be seen it the pattern of sales and income shown in the year-earlier period. Second quarter 1980 sales of these 26 companies were only slightly above the first quarter level, while earnings held flat. In the third quarter of 1980 however, sales rose in line with the turn-around in total economic activity and profits showed a less than seasonal decline.

26 Paper and Allied Products Companies

	Net Sales			Net Income After Taxes			Margin on Sales	
	1981	1980	Change	1981	1980	Change	1980	1980
	$Millions		%	$Millions		%	%	%
1st Qtr.	9,694	8,989	7.8	505.9	526.6	-3.9	5.2	5.9
2nd Qtr.	10,218	9,028	+13.2	574.8	525.2	+9.4	5.6	5.8
3rd Qtr.	9,838	9,148	+7.5	417.1	470.8	-11.4	4.2	5.1
Totals:	29,750	27,165	+9.5	1,497.8	1,522.6	-1.6	5.0	5.6

Note: Earnings data adjusted to exclude gains or losses from sales of plant or or property and similar non-operating income.

INDUSTRY FACT SHEET

A 2500-2

AMERICAN PAPER INSTITUTE, INC.
260 Madison Avenue
New York, New York 10016

OCTOBER 29, 1981

11/21

	PRODUCTION (000 TONS)					
	Sept 1981	Aug. 1981	Sept 1980	Jan - Sept 1981	Jan - Sept 1980	% Change 81/80
PAPER GRADES	P	R				
Newsprint	435	469	389	3921	3489	12.4
Uncoated Groundwood (s)	116	126	122	1085	1125	-3.5
Coated Paper (s)	434	422	390	3723	3450	7.9
Uncoated Free Sheet Paper (s)	637	644	635	5966	6011	-0.7
Thin Paper (c)	29	30	28	258	259	-0.1
Cotton Fiber Paper (s)	11	10	10	90	93	-2.7
Bleached Bristols (s)	95	94	74	822	740	11.0
Tissue Paper	360	395	355	3358	3289	2.1
Unbleached Kraft Packaging & Indl. Converting (s)	315	330	326	2965	2975	-0.4
Other Paper (c)	137	146	127	1282	1201	6.7
TOTAL PAPER	2568	2666	2455	23469	22631	3.7
PAPERBOARD GRADES						
Kraft Linerboard, Unbleached	1220	1318	1180	11264	10778	4.5
Other Kraft Paperboard	69	65	86	830	834	-0.5
Semichemical Paperboard	391	396	381	3626	3542	2.4
Bleached Paperboard	319	336	308	3022	2922	3.4
Recycled Paperboard	593	622	574	5453	5277	3.3
TOTAL PAPERBOARD	2592	2737	2528	24195	23353	3.6
CONSTRUCTION & WET MACH GRADES(c)	191	211	208	1811	1931	-6.2
TOTAL PAPER AND PAPERBOARD	5351	5613	5192	49475	47915	3.3
HARD PRESSED BD.[not in total](c)	155	180	187	1538	1423	8.1

WOOD PULP (ALL GRADES)	Aug. 1981	July 1981	Aug. 1980	Jan - Aug. 1981	Jan - Aug. 1980	% Change 81/80
Dissolving & Special Alpha	140	102	129	936	1041	-10.1
Bleached Sulphite	115	102	119	960	950	1.1
Unbleached Sulphite	40	25	31	267	259	3.1
Bleached & Semi-Bl. Sulph.	1747	1566	1609	13530	12772	5.9
Unbleached Sulphate	1698	1563	1678	13390	13241	1.1
Semichemical	330	313	334	2712	2720	-0.3
Groundwood and Thermo-Mechanical	444	387	399	3345	3037	10.1
TOTAL PULP DIVISION DATA	4514	4058	4299	35141	34019	3.3
Defib. Exploded & Screws E	243	221	216	1852	1586	16.8
TOTAL WOOD PULP PRODUCTION	4757	4278	4515	36993	35605	3.9

Note: Paperboard cumulative totals include revisions not available monthly.

(s) - Shipments R - Revised E - Estimate
P - Preliminary (c) - Census Data - Production, last 2 months estimated.

October 29, 1981

	Full Year		INDUSTRY DATA 1981			Ann. Rate Year - To - Date	% From Same Pd. Last Yr.
			R	R	P		
PAPER AND PAPERBOARD -- Tons (000)	1979	1980	July	August	September		
Total Production (API)..... !	64594R	63701R	5150	5613	5351	65966	3.3
Total Seasonally Adjusted.... ! excluding !			5461	5404	5580	65584	3.6
Imports (including Products).! hard pressed !..E	9123	8778	675	619	620	8243	-7.9
Exports (including Products).! board !..E	3672	5214	415	356	356	4823	-5.2
Apparent Consumption..... ! !...	70045Rs	67265Rb	5721	5668	5844	69004c	2.7
Paper Production % Tonnage Capacity.....	95.9Rs	92.8Rs	91.2	90.0	89.3	92.1sh	-
Paperboard Production % Tonnage Capacity.....	94.0s	91.5s	83.8	91.8	89.3	94.3s	-
			June	July	August		
MARKET WOOD PULP PRODUCTION - Tons (000).....	5678	6488	538	479	580	6287	-4.7
TOTAL WOOD PULP PRODUCTION - Tons (000)..(f).....	49367	50560	4393	4057	4514	52712	3.3
WOOD PULP IMPORTS - TONS (000).....	4318	4051	349	329	323	4207	0.3
WOOD PULP EXPORTS - TONS (000).....	2935	3006	359	237	300	3712	-4.2
RAW MATERIALS CONSUMPTION - Tons (000)							
..PAPER AND BOARD MILLS			June	July	August		
Wood Pulp..(k).....	49804	49426	4251	3987	4370	51699	3.8
Waste Paper....(d).....	15361	14520	1239	1115	1249	14810	4.5
Other (Census)..... E	702	607	50	47	50	614	3.3
Total.....	65867	64552	5541	5148	5669	67122	3.9
..WOOD PULP - NON PAPER..... E	913	825	73	66	70	811	-2.5
PULPWOOD CONSUMPTION Cords(000)Amer.Pulpwd. Assn	79566	80522	6790	6526	6796	80676	-0.8
EMPLOYMENT (000)			July	August	September		
Paper and Allied Products.....Total.....	706.8	694.0	696.4	701.0	704.5	694.5	-0.1
Pulp, Paper and Board Mills.....Total.....E	271.4	269.0	273.0	272.5	273.8	269.9	0.4
AVERAGE HOURLY EARNINGS OF PRODUCTION WORKERS ($)							
Paper and Allied Products.....	7.13	7.84	8.73	8.68	8.99	8.51	10.0
Pulp, Paper Mills..... E	8.26	9.15	10.22	10.18	10.45	9.90	10.0
Paperboard Mills..... E	8.38	9.28	10.52	10.31	10.55	10.12	10.7
CAPITAL EXPENDITURES: PAPER & ALLIED PRODUCTS			1981 Q1	1981 Q2	1981 Q3		
(Rept. by US Dept. of Com.; Ann. Rates: Bill.$)$	5.55	6.80	6.93	6.42	6.48	6.54	-3.8w
INDEX OF OUTPUT PER MAN-HOUR (1977=100).....			July	August	September		
!IN PULP, PAPER !...Production Worke.....	106.0R	107.8R	106.7	107.9	109.6	109.2	1.6
!AND BOARD MILLS!...All Employees.....	105.3R	106.3R	105.6	106.6	109.0	108.0	2.1
PAPER AND ALLIED PRODUCTS (Million $)			June	July	August		
Industry Shipments (Dept. of Commerce)$.....	66074	71736	6392	6493	6405	77447	10.3
Pulp, Paper and Paperboard$.....	28771	31952	2797	2812	2794	33848	7.9
Inventories (End of Period) - Total Industry$.	7079	7798	8332	8429	8455	8455	7.7
Pulp, Paper and Paperboard$.....	2435	2794	3018	3051	3126	3126	9.0
			1980 Q4	1981 Q1	1981 Q2		
Sales (Corporations Only, FTC).....	55359	54737RS	14145	14402	15249	59302	10.2
Earnings (Corporations Only, FTC).....	3724	2781RS	689	758	853	3222	9.5
Depreciation (Corporations Only, FTC).....	1896	1990RS	518	534	550	2168	12.0
Net Worth (Corporations Only, FTC).....	23206	23873RS	23873	24340	25000	25000	9.5
PRICE INDEXES (Bureau of Labor Stats)1967=100			July	August	September		
Total Pulp, Paper and Allied Products.....	219.0	249.2	273.8	275.7	276.9	271.1	9.7
Wood Pulp.....	314.3	380.3	396.6	396.6	396.6	393.9	4.5
Waste Paper.....	206.6	208.7	182.1	182.1	178.8	183.9	-14.1
Paper.....	229.6	256.8	280.0	283.8	287.1	277.7	9.3
Paperboard.....	202.1	234.6	261.6	261.2	262.5	257.9	10.8
PAPER DEMAND (INDEXED! 1967=100)							
Total Paper Production $.....	142.9R	143.9R	July 150.9	August 147.3	September 152.9	149.1	4.1
Paper New Supply $.....	139.2R	136.1R	138.6	133.8	138.1	137.7	1.1
Total End - Use Index $.....	145.0	146.3	151.0	151.3	151.6	150.2	3.3
Production of Nondurable Goods $...(19%)..	164.1	161.2	166.9	166.7	166.4	166.1	3.5
Disposable Income (Constant $) $...(23%)..	150.0	151.0	154.4	154.4	154.8	153.8	2.1
Total Printing and Publishing $...(58%)..	136.8	139.5	144.4	145.0	145.4	143.6	3.6
Trend Factor			Not Available				
PAPERBOARD DEMAND (INDEXED! 1967=100)							
Total Paperboard Production $.....	137.9	135.4	138.0	138.9	142.9	140.1	4.0
Production for Domestic Use	135.5	128.3	135.5	133.8	141.1	136.2	7.1
Total End - Use Index $.....	152.0	146.1	152.2	151.3	150.4	150.8	3.7
Production of Consumer Goods $...(60.49%)	150.6	145.4	150.2	149.0	148.5	149.0	2.9
Production of Equipment $...(6.62%)	142.2	145.2	154.3	154.6	154.3	151.9	5.0
Production of Materials $...(32.89%)	156.4	147.6	155.4	154.8	153.1	154.0	4.8
Trend Factor			Not Available				
NEWSPRINT MARKETS							
Consumption by Publishers - Tons (000).....	11240	11121	June 897	July 873	August 915	10916	0.6
Newspaper Pub. and Printing Empl. Total(000)..	420.1	422.8	432.3	433.0	434.0	429.3	1.7
PRINTING AND FINE PAPER MARKETS							
MAGAZINE ADVERTISING PAGES (LNA, Inc.).....	114956	116769	9627	7815	7585	111006	0.7
WHOLESALERS SALES AND INVENTORIES (Million $)							
Total Paper & Pap. Prdcts.,ex Wallpaper..Sales	19271	21643	2098	2078	2121	24450	16.4
Inventories (End of Period)	1671	1849	2024	2058	2072	2072	21.0
Paper Only..... Sales	14510	15879	1530	1534	1543	17733	14.5
Inventories (End of Period)	1124	1248	1346	1373	1377	1377	19.7
RETAIL TRADE (Million $)			July	August	September		
Total Retail Sales $.....	892496	953984	87350	88449	88838	1044344	10.9
Nondurable Goods Stores Sales $.....	588697	636231	59597	60008	60042	712016	9.9
GENERAL ECONOMIC DATA							
TOTAL INDUSTRIAL PRODUCTION (INDEX 1967 = 100)$.	152.5	147.0	153.8	153.3	152.1	152.4	4.1
PRODUCER PRICES(ALL COMMODITIES)(INDX 1967=100).	235.5	268.8	296.0	296.2	295.5	292.5	10.2
CONSUMER PRICES (ALL ITEMS) (INDEX 1967 = 100)..	217.4	246.8	274.4	276.5	279.3	269.6	10.6
			June	July	August		
TOTAL CONSUMER CREDIT OUTSTANDING - (Billion $).	312.0	313.4	318.5	320.9	324.7	324.7	6.2
GROSS NATIONAL PRODUCT - ANNUAL RATE ($Billion$).			1981 Q1	1981 Q2	1981 Q3		
G.N.P. or Expenditure - Current $.....	2413.9	2626.1	2853.0	2885.8	2947.0	2895.3	11.7
G.N.P. OR Expenditure - 1972 $.....	1483.0	1480.7	1516.4	1510.4	1508.2	1511.7	2.2

lb/capita Popul.(mil)
:a - 622 225.1
:b - 591 227.7
:c - 602 229.3
:d - 1979 - 12915; 1980 - 12705
: Jan-July'81 ARY-T-D - 13719
: (000 tons) as pub. by Census
:E - Last month estimated by API

f - Wood Pulp Production excludes estimates for def. expl. & screws. Prod. was: 1979 - 3,274; 1980 - 2451; 1981 Jan-Aug ARY-T-D 2778 (000 tns)
s - Adjusted for holiday shutdowns
h - Adjusted to conform with API Division data
k - Excludes consumption of defib. & expl. pulp for hard p. bd.: '79 - 1,507; '80 - 1,124 (000 tons) 1981 ARY-T-D - 1258

N.A. - Not Available
P - Preliminary
a - Quarter
R - Revised
RS - Revised Series
w - Full year estimated by U.S. Dept. of Commerce
$ - Seasonally adjusted